## SEQUENCE LISTING

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<110> Agriculture and Agri-Food Canada; The University of Saskatchewan
<120> Cyclin Dependant Kinase Inhibitors as Plant Growth
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<130> 81601-3
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<150> CA 2,256,121
<151> 1998-12-31
<160> 16
<170> PatentIn Ver. 2.0
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gtg aga aaa tat aga aaa gct aaa gga att gta gaa gct gga gtt tcg
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Val Arg Lys Tyr Arg Lys Ala Lys Gly Ile Val Glu Ala Gly Val Ser
                                  10
tca acg tat atg cag cta cgg agc cgg aga att gtt tat gtt aga tcg
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Ser Thr Tyr Met Gln Leu Arg Ser Arg Arg Ile Val Tyr Val Arg Ser
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gaa aaa tca age tet gte tee gte gte ggt gat aat gga gtt teg teg
                                                                    201
Glu Lys Ser Ser Ser Val Ser Val Val Gly Asp Asn Gly Val Ser Ser
tct tgt agt gga agc aat gaa tat aag aag aaa gaa tta ata cat ctg
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Ser Cys Ser Gly Ser Asn Glu Tyr Lys Lys Lys Glu Leu Ile His Leu
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                     55
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							tac Tyr 185									627
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<213> Arabidopsis thaliana

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Ser Glu Lys Ser Ser Ser Val Ser Val Val Gly Asp Asn Gly Val Ser 35 40 45

Ser Ser Cys Ser Gly Ser Asn Glu Tyr Lys Lys Lys Glu Leu Ile His 50 60



Leu Glu Glu Glu Asp Lys Asp Gly Asp Thr Glu Thr Ser Thr Tyr Arg 65 70 75 80

Arg Val Thr Lys Arg Lys Leu Phe Glu Asn Leu Arg Glu Glu Lys 85 90 95

Glu Glu Leu Ser Lys Ser Met Glu Asn Tyr Ser Ser Glu Phe Glu Ser 100 105 110

Ala Val Lys Glu Ser Leu Asp Cys Cys Cys Ser Gly Arg Lys Thr Met
115 120 125

Glu Glu Thr Val Thr Ala Glu Glu Glu Lys Ala Lys Leu Met Thr 130 135 140

Glu Met Pro Thr Glu Ser Glu Ile Glu Asp Phe Phe Val Glu Ala Glu 145 150 155 160

Lys Gln Leu Lys Glu Lys Phe Lys Lys Lys Tyr Asn Phe Asp Phe Glu 165 170 175

Lys Glu Lys Pro Leu Glu Gly Arg Tyr Glu Trp Val Lys Leu Glu 180 \$180\$ 185 \$190\$

<210> 3

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<212> DNA

<213> Arabidopsis thaliana

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<213> Arabidopsis thaliana

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tgatgataat gatgatcatt gttttcacca aagtacttat tatttctctt ctgtaataat 600 ctttgctttg attttcttt taacaaaatc caaatgtaga tatctttctc tcgaataatc 660 aataacatgt aattcaactt ttgtttgtac ttccttgagg taattaatta gattcgtgtt 720 tttctcgatt aataaactat aagtttataa ctaaa 755

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<213> Arabidopsis thaliana

<400> 7

<210> 8

<211> 642

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<400> 8

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aatttcagga aacagggaat ttcatcaagc gagaatctgg gagaaacagc agaaatggac 420 tcggcgacga cggagatgag agatcagaga aagacggaga agaagaagaa gatggaaaaa 480 tcaccgacgc aggcagagct tgatgacttt ttctcggcgg cggagagata cgaacagaaa 540 cgattcacag aaaagtacaa ctacgacatc gtcaatgata cgccgcttga aggtcggtac 600 cagtgggtta gtctgaaacc ttagaagcca tggaagaaca aa 642

<210> 9

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<212> DNA

<213> Arabidopsis thaliana

<400> 9

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<213> Arabidopsis thaliana

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Ser Glu Lys Ser Ser Ser Val Ser Val Val Gly Asp Asn Gly Val Ser 35 40 45

Ser Ser Cys Ser Gly Ser Asn Glu Tyr Lys Lys Lys Glu Leu Ile His 50 55 60

Leu Glu Glu Glu Asp Lys Asp Gly Asp Thr Glu Thr Ser Thr Tyr Arg 65 70 75 80

Arg Gly Thr Lys Arg Lys Leu Cys Glu Asn Leu Arg Glu Glu Lys 85 90 95 Glu Glu Leu Ser Lys Ser Met Glu Asn Tyr Ser Ser Glu Phe Glu Ser

Ala Val Lys Glu Ser Leu Asp Cys Cys Cys Ser Gly Arg Lys Thr Met 115 120 125

Glu Glu Thr Val Thr Ala Glu Glu Glu Lys Ala Lys Leu Met Thr 130 135 140

Glu Met Pro Thr Glu Ser Glu Ile Glu Asp Phe Phe Val Glu Ala Glu 145 150 155 160

Lys Gln Leu Lys Glu Lys Phe Lys Lys Lys Tyr Asn Phe Asp Phe Glu 165 170 175

Lys Glu Lys Pro Leu Glu Gly Arg Tyr Glu Trp Val Lys Leu Glu 180 185 190

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<212> PRT

<213> Arabidopsis thaliana

<400> 11

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Gly Gly Ile Val Ala Arg Asn Ser Ala Gly Ala Ser Glu Thr Ser Val 20 25 30

Val Ile Val Arg Arg Arg Asp Ser Pro Pro Val Glu Glu Gln Cys Gln 35 40 45

Ile Glu Glu Glu Asp Ser Ser Val Ser Cys Cys Ser Thr Ser Glu Glu 50 55 60

Lys Ser Lys Arg Arg Ile Glu Phe Val Asp Leu Glu Glu Asn Asn Gly 65 70 75 80

Asp Asp Arg Glu Thr Glu Thr Ser Trp Ile Tyr Asp Asp Leu Asn Lys 85 90 95

Ser Glu Glu Ser Met Asn Met Asp Ser Ser Ser Val Ala Val Glu Asp 100 105 110 '

Val Glu Ser Arg Arg Leu Arg Lys Ser Leu His Glu Thr Val Lys 115 120 125

Glu Ala Glu Leu Glu Asp Phe Phe Gln Val Ala Glu Lys Asp Leu Arg 130 135 140

Asn Lys Leu Leu Glu Cys Ser Met Lys Tyr Asn Phe Asp Phe Glu Lys 145 150 155 160

Asp Glu Pro Leu Gly Gly Gly Arg Tyr Glu Trp Val Lys Leu Asn Pro 165 170 175

<210> 12

<211> 212

<212> PRT

<213> Arabidopsis thaliana

<400> 12

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Phe Ser Pro Leu Lys Lys Thr Lys Leu Asn Asp Ser Ser Asp Ser Ser 35 40 45

Pro Asp Ser His Asp Val Ile Val Phe Ala Val Ser Ser Ser Val 50 55 60

Ala Ser Ser Ala Ala Leu Ala Ser Asp Glu Cys Ser Val Thr Ile Gly 65 70 75 80

Gly Glu Glu Ser Asp Gln Ser Ser Ser Ile Ser Ser Gly Cys Phe Thr 85 90 95

Ser Glu Ser Lys Glu Ile Ala Lys Asn Ser Ser Ser Phe Gly Val Asp 100 105 110

Leu Glu Asp His Gln Ile Glu Thr Glu Thr Glu Thr Ser Thr Phe Ile 115 120 125

Thr Ser Asn Phe Arg Lys Glu Thr Ser Pro Val Ser Glu Gly Leu Gly 130 135 140

Glu Thr Thr Glu Met Glu Ser Ser Ser Ala Thr Lys Arg Lys Gln 145 150 155 160

Pro Gly Val Arg Lys Thr Pro Thr Ala Ala Glu Ile Glu Asp Leu Phe 165 170 175

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Tyr Asn Phe Asp Ile Val Asn Asp Glu Pro Leu Glu Gly Arg Tyr Lys 195 200 205

Trp Asp Arg Leu 210

<210> 13

<211> 208

<212> PRT

<213> Arabidopsis thaliana

<400> 13

Leu Ser Pro Glu Lys Thr Ile Met Ser Leu Arg Glu Met Ser Glu Thr 1 5 10 15

Lys Pro Lys Arg Asp Ser Glu Tyr Glu Gly Ser Asn Ile Lys Arg Met 20 25 30

Arg Leu Asp Asp Asp Asp Val Leu Arg Ser Pro Thr Arg Thr Leu 35 40 45

Ser Ser Ser Ser Ser Ser Leu Ala Tyr Ser Val Ser Asp Ser Gly
50 55 60

Gly Phe Cys Ser Val Ala Leu Ser Glu Glu Glu Asp Asp His Leu Ser 65 70 75 80

Ser Ser Ile Ser Ser Gly Cys Ser Ser Ser Glu Thr Asn Glu Ile Ala 85 90 95

Thr Arg Leu Pro Phe Ser Asp Leu Glu Ala His Glu Ile Ser Glu Thr 100 105 110

Glu Ile Ser Thr Leu Leu Thr Asn Asn Phe Arg Lys Gln Gly Ile Ser 115 120 125

Ser Ser Glu Asn Leu Gly Glu Thr Ala Glu Met Asp Ser Ala Thr Thr 130 135 140

Glu Met Arg Asp Gln Arg Lys Thr Glu Lys Lys Lys Lys Met Glu Lys 145 150 . 155 160

Ser Pro Thr Gln Ala Glu Leu Asp Asp Phe Phe Ser Ala Ala Glu 165 170 175

Arg Tyr Glu Gln Lys Arg Phe Thr Glu Lys Tyr Asn Tyr Asp Ile Val 180 185 190

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<210> 14

<211> 137

<212> PRT

<213> Arabidopsis thaliana

<400> 14

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Ser Val Gln Val Ser Cys Gly Glu Asn Ser Leu Gly Phe Glu Ser Arg 35 40 45

His Ser Thr Arg Glu Ser Thr Pro Cys Asn Phe Val Glu Asp Met Glu 50 55 60

Ile Met Val Thr Pro Gly Ser Ser Thr Arg Ser Met Cys Arg Ala Thr 65 70 75 80

Lys Glu Tyr Thr Arg Glu Gln Asp Asn Val Ile Pro Thr Thr Ser Glu 85 90 95

Met Glu Glu Phe Phe Ala Tyr Ala Glu Gln Gln Gln Arg Leu Phe 100 105 110

Met Glu Lys Tyr Asn Phe Asp Ile Val Asn Asp Ile Pro Leu Ser Gly 115 120 125

Arg Tyr Glu Trp Val Gln Val Lys Pro 130 135

<210> 15

<211> 804

<212> DNA

<213> Chenopodium rubrum

<400> 15

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<210> 16

<211> 196

<212> PRT

<213> Chenopodium rubrum

<400> 16

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1 5 10 15

Lys Val Ser Lys Ser Ser Tyr Asn Ile Pro Gln Leu Arg Ser Arg Arg
20 25 30

Lys Asn Leu Ser Ala Pro Glu Asn Phe Ala Glu Leu Glu Thr Thr Pro 35 40 45





Leu Glu Val Ala Ala Val Val Glu Glu Glu Val Ala Asn Cys Ser 50 55 60

Ser Ser Glu Val Ile Thr Thr Ala Arg Ser Asp Phe Pro Pro Ser Cys
65 70 75 80

Cys Ser Ser Asn Tyr Asp Gln Leu Ser Ser Ser Glu Pro Glu Val Val 85 90 95

Lys Asp Asp Gly Leu Gly Asn Arg Thr Ala Asp Pro Glu Val Glu 100 105 110

Ser Gly Glu Ala Ser Ser Lys Gln Lys Glu Ser His Arg Thr Glu Ala 115 120 125

Arg Glu Ala Thr Lys Leu Asp Asp Gln Asp Tyr Pro Ala Thr Lys Ser 130 135 140

Thr Val Gln Ile Lys Met Pro Ser Asp Ser Glu Ile Glu Glu Phe Phe 145 150 155 160

Ala Val Ala Glu Lys Asp Leu Gln Lys Arg Phe Ser Glu Lys Tyr Asn 165 170 175

Phe Asp Ile Val Lys Asp Val Pro Leu Lys Gly Arg Tyr Asp Trp Val 180 185 190

Pro Ile Asn Pro 195